Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-530 (Canceled).

531. (Currently amended) A method of treating an angiogenic disease or condition in an animal comprising administering to the animal an effective amount of a metal-binding peptide which does not have a metal ion bound to it, the sequence of the peptide being:

$$P_1 - P_2,$$

wherein:

P_1 is:

Xaa_1 Xaa_2 His or

Xaa_1 Xaa_2 His Xaa_3,

the P_1 portion of the peptide being linear;

P_2 is $(Xaa_4)_n$;

Xaa_1 is the N-terminal amino acid of the peptide, the only substituents on the α-amino group of Xaa_1 are hydrogen, and Xaa_1 is glycine, alanine, valine, leucine, isoleucine, serine, threonine, aspartic acid, asparagine, glutamic acid, glutamine, lysine, hydroxylysine, histidine, arginine, ornithine, phenylalanine, tyrosine, tryptophan, cysteine, methionine, or α-hydroxymethylserine;

Xaa_2 is ~~glycine,~~ alanine, β-alanine, valine, leucine, isoleucine, serine, threonine, aspartic acid, asparagine, glutamic acid, glutamine, lysine, hydroxylysine, histidine, arginine, ornithine, phenylalanine, tyrosine, tryptophan, cysteine, methionine, or α-hydroxymethylserine;

Xaa_3 is glycine, alanine, valine, lysine, arginine, ornithine, aspartic acid, glutamic acid, asparagine, glutamine or tryptophan;

Xaa_4 is any amino acid; and

n is 0-10 ~~0-100~~;

or a physiologically-acceptable salt thereof.

532. (Currently Amended) The method of Claim 531 wherein:

Xaa_1 is glycine, alanine, valine, leucine, isoleucine, serine, threonine, aspartic acid, glutamic acid, lysine, hydroxylysine, histidine, arginine, or α-hydroxymethylserine, and

Xaa_2 is ~~glycine,~~ alanine, valine, leucine, isoleucine, threonine, serine, asparagine, glutamine, cysteine, methionine, lysine, hydroxylysine, histidine, arginine, or α-hydroxymethylserine.

533. (Previously presented) The method of Claim 531 wherein Xaa_1 is aspartic acid, glutamic acid, arginine, threonine or α-hydroxymethylserine.

534. (Currently amended) The method of Claim 531 wherein Xaa_2 is ~~glycine,~~ alanine, valine, leucine, isoleucine, threonine, serine, asparagine, methionine, histidine or α-hydroxymethylserine.

535. (Previously presented) The method of Claim 531 wherein Xaa_3 is lysine.

536. (Currently amended) The method of Claim 531 wherein:

Xaa_1 is aspartic acid, glutamic acid, arginine, lysine, threonine, serine or α-hydroxymethylserine,

Xaa_2 is ~~glycine,~~ alanine, valine, leucine, isoleucine, threonine, serine, asparagine, methionine, histidine or α-hydroxymethylserine, and

Xaa_3, when present, is lysine.

537. (Currently amended) The method of Claim 536 wherein Xaa_1 is aspartic acid or glutamic acid and Xaa_2 is ~~glycine,~~ alanine, valine, leucine, isoleucine, threonine, serine or α-hydroxymethylserine.

538. (Currently amended) The method of Claim 537 wherein Xaa_2 is ~~glycine,~~ alanine, valine, leucine or isoleucine.

539. (Previously presented) The method of Claim 538 wherein P_1 is Asp Ala His or Asp Ala His Lys.

540. (Previously presented) The method of Claim 539 wherein P_1 is Asp Ala His Lys.

541. (Currently amended) The method of Claim 536 wherein Xaa_1 is arginine, lysine,

threonine, serine or α-hydroxymethylserine, and Xaa_2 is ~~glycine,~~ alanine, valine, leucine, isoleucine, threonine, serine or α-hydroxymethylserine.

542. (Previously presented) The method of Claim 541 wherein P_1 is Thr Leu His, HMS HMS His or Arg Thr His.

543. (Cancelled)

544. (Currently amended) The method of Claim ~~543~~ 531 wherein n is 0-5.

545. (Previously presented) The method of Claim 544 wherein n is 0.

546. (Previously presented) The method of Claim 531 wherein P_2 comprises a metal-binding sequence.

547. (Currently amended) The method of Claim 546 wherein P_2 comprises one of the following sequences:

~~$(Xaa_4)_m$ Xaa_3 His Xaa_2 Xaa_5,~~

~~$(Xaa_4)_m$ His Xaa_2 Xaa_5,~~

$(Xaa_4)_m$ Xaa_5 Xaa_2 His Xaa_3, or

$(Xaa_4)_m$ Xaa_5 Xaa_2 His,

wherein:

m is 0-5; and

Xaa_5 is an amino acid having a free side-chain $-NH_2$, and $(Xaa_4)_m$, if present, or P_1 is attached to Xaa_5 by means of the side-chain amino group.

~~wherein Xaa_5 is an amino acid having a free side-chain $-NH_2$ and m is 0-5.~~

548. (Previously presented) The method of Claim 547 wherein Xaa_5 is Orn or Lys.

549. (Canceled)

550. (Previously presented) The method of Claim 546 wherein P_2 comprises a sequence which binds Cu(I).

551. (Previously presented) The method of Claim 550 wherein P_2 comprises one of the following sequences:

Met Xaa_4 Met,

Met Xaa_4 Xaa_4 Met,

Cys Cys,

Cys Xaa_4 Cys,

Cys Xaa_4 Xaa_4 Cys,

Met Xaa_4 Cys Xaa_4 Xaa_4 Cys,

Gly Met Xaa_4 Cys Xaa_4 Xaa_4 Cys [SEQ ID NO:7],

Gly Met Thr Cys Xaa_4 Xaa_4 Cys [SEQ ID NO:8],

Gly Met Thr Cys Ala Asn Cys [SEQ ID NO:9], or

γ-Glu Cys Gly.

552. (Previously presented) The method of Claim 551 wherein P_2 is Gly Met Thr Cys Ala Asn Cys [SEQ ID NO:9].

553. (Previously presented) The method of Claim 531 wherein P_2 comprises a sequence which enhances the ability of the peptide to penetrate cell membranes, reach target tissues, or both.

554. (Previously presented) The method of Claim 553 wherein P_2 is hydrophobic or an arginine oligomer.

555. (Previously presented) The method of Claim 531 wherein at least one of the amino acids of P_1 other than β-alanine, when present, is a D-amino acid.

556. (Previously presented) The method of Claim 555 wherein Xaa_1 is a D-amino acid or His is a D-amino acid, or both Xaa_1 and His are D-amino acids.

557. (Previously presented) The method of Claim 555 wherein all of the amino acids of P_1 other than β-alanine, when present, are D-amino acids.

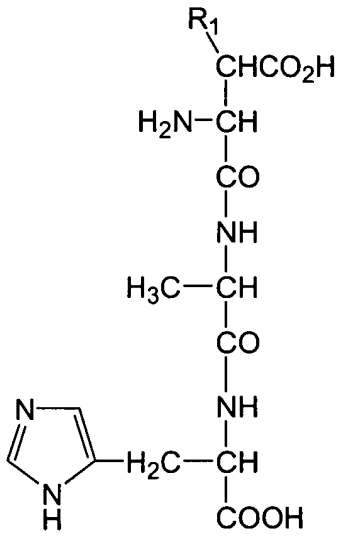
558. (Currently amended) The method of Claim 531 or 555 wherein at least <u>one</u> ~~50%~~ of the amino acids of P_2 <u>is a</u> ~~are~~ D-amino ~~acids~~ <u>acid</u>.

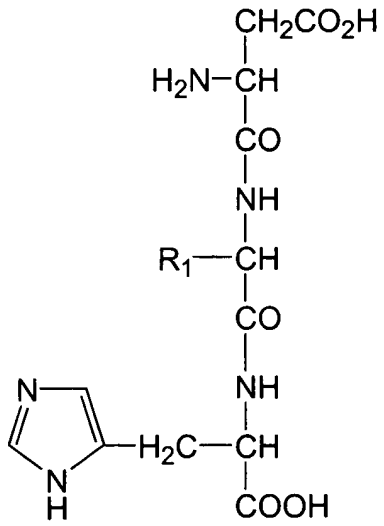
559. (Previously presented) The method of Claim 531 wherein at least one amino acid of P_1 or at least one amino acid of P_2, or at least one amino acid of P_1 and at least one amino acid of P_2 is substituted with (a) a substituent that increases the lipophilicity of the peptide without

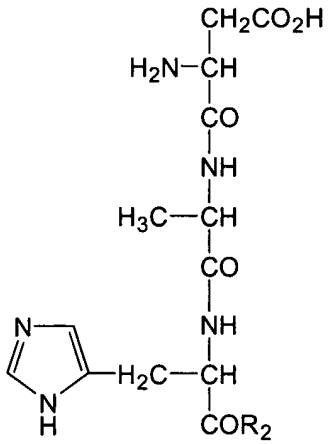
altering the ability of P_1 to bind metal ions, (b) a substituent that protects the peptide from proteolytic enzymes without altering the ability of P_1 to bind metal ions, or (c) a substituent which is a non-peptide, metal-binding functional group that improves the ability of the peptide to bind metal ions.

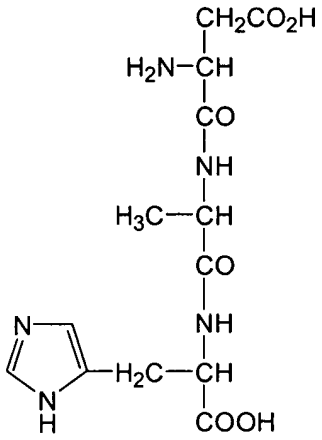
560. (Previously presented) The method of Claim 559 wherein the terminal -COOH of P_1-P_2 is substituted to produce $-COR_2$, wherein R_2 is $-NH_2$, $-NHR_1$, $-N(R_1)_2$, $-OR_1$, or $-R_1$, wherein R_1 is an alkyl, aryl or heteroaryl.

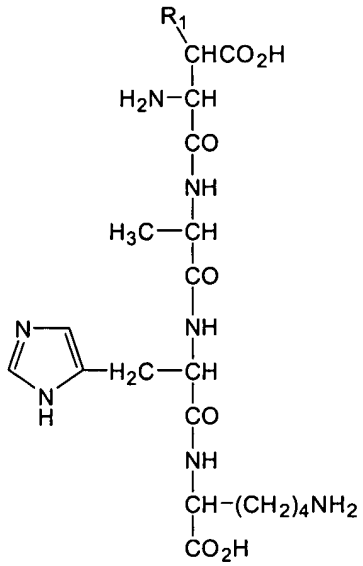
561. (Previously presented) The method of Claim 559 wherein n is 0 and P_1 has one of the following formulas:

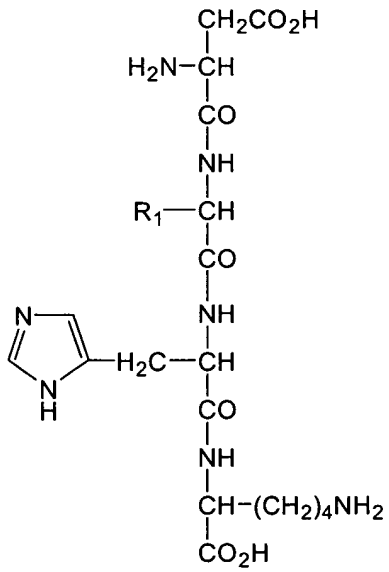


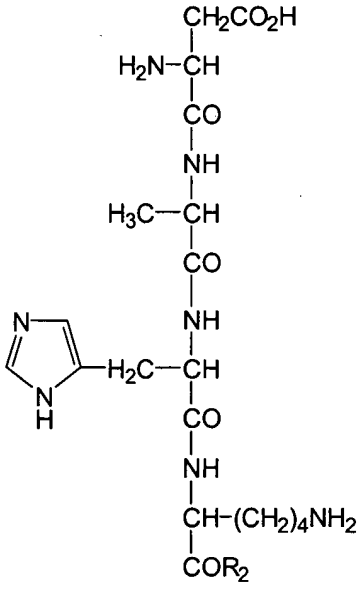


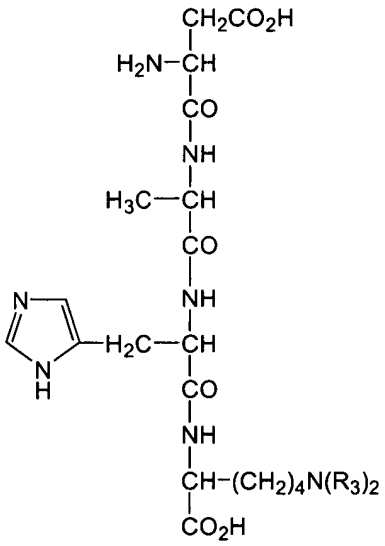












wherein:

R_1 is an alkyl, aryl, or heteroaryl;

R_2 is $-NH_2$, $-NHR_1$, $-N(R_1)_2$, $-OR_1$, or $-R_1$; and

R_3 is H, a non-peptide, metal-binding functional group or the two R_3 groups together

form a non-peptide, metal-binding functional group.

562. (Previously presented) The method of Claim 561 wherein R_2 is $-NH_2$.

563. (Previously presented) The method of Claim 531 wherein the method further comprises administering an effective amount of another metal-binding compound in combination with the peptide.

564. (Previously presented) The method of Claim 563 wherein the metal-binding compound binds iron.

565. (Previously presented) The method of Claim 564 wherein the iron-binding compound is deferoxamine mesylate.

566. (Previously presented) The method of Claim 563 wherein the metal-binding compound binds Cu(I).

567. (Previously presented) The method of Claim 566 wherein the Cu(I)-binding compound is a peptide.

568. (Previously presented) The method of Claim 567 wherein the Cu(I)-binding peptide comprises one of the following sequences:

Met Xaa_4 Met,

Met Xaa_4 Xaa_4 Met,

Cys Cys

Cys Xaa_4 Cys,

Cys Xaa_4 Xaa_4 Cys,

Met Xaa_4 Cys Xaa_4 Xaa_4 Cys,

Gly Met Xaa_4 Cys Xaa_4 Xaa_4 Cys [SEQ ID NO:7],

Gly Met Thr Cys Xaa_4 Xaa_4 Cys [SEQ ID NO:8],

Gly Met Thr Cys Ala Asn Cys [SEQ ID NO:9], or

γ-Glu Cys Gly,

wherein Xaa_4 is any amino acid.

569. (Currently amended) The method of any one of Claims ~~531-568~~ 531-542, 544-548

or 550-568 wherein the angiogenic disease or condition is a neoplastic disease, a connective tissue disorder, psoriasis, an ocular angiogenic disease, a cardiovascular disease, a cerebral vascular disease, hemophiliac joints, an immune disorder, a benign tumor, hypertrophy, endometriosis, polyposis, or obesity.

570. (Previously presented) The method of Claim 569 wherein the angiogenic disease or condition is a neoplastic disease.

571. (Previously presented) The method of Claim 570 wherein the neoplastic disease is a tumor.

572. (Previously presented) The method of Claim 571 wherein the tumor is located in the bladder, brain, breast, kidney, liver, pancreas, lung, cervix, ovary, prostate, stomach, intestines, colon, rectum, or uterus.

573. (Previously presented) The method of Claim 570 wherein the neoplastic disease is tumor metastasis.

574. (Previously presented) The method of Claim 569 wherein the angiogenic disease or condition is psoriasis.

575. (Previously presented) The method of Claim 569 wherein the angiogenic disease or condition is an ocular angiogenic disease.

576. (Previously presented) The method of Claim 575 wherein the ocular angiogenic disease is macular degeneration.